IN THE CLAIMS:

Claims 1-59 (Canceled).

60. (currently amended) A cured flexible thermal control composite comprising an endothermic agent distributed, dispersed and suspended in a ~~polymer~~ fluorelastomer having a molecular structure consisting of long chains of mostly linear molecules which prior to curing provide interstitial spaces through which the endothermic agent is distributed, dispersed and suspended and become fixed therein on curing.

61. (original) The flexible thermal control composite of claim 60, further comprising a thermally conductive material contacted to said flexible thermal control composite.

62.(original) The flexible thermal control composite of claim 60, wherein the endothermic agent is recyclable.

63. (original) The flexible thermal control composite of claim 60, wherein the endothermic agent is micronized.

64. (original) The flexible thermal control composite of claim 60, wherein said endothermic agent is selected from the group consisting of oxidized polymers, unoxidized polymers, oxidized homopolymers of ethylene polymer compounds, unoxidized homopolymers of ethylene polymer compounds, carbon monoxide-bonded copolymers, micronized polyethylene waxes, petroleum derived waxes, ethylene-bis-stearamide, N,N-ethylene-bis-stearamide, tars, high molecular weight oils, high molecular weight hydrocarbons, polyvinyl alcohols, oxidized polyethylene homopolymers, unoxidized polyethylene homopolymers, carnauba wax, aluminum hydroxide, calcium hydroxide, potassium hydroxide, lithium hydroxide, boric acid, paraldehyde, paraformaldehyde, trioxane, lithium formate, lithium acetate, lithium carbonate, calcium carbonate, silicon carbonate, magnesium carbonate, sodium bicarbonate, salts of acetic acid, salts of formic acid, salts of boric acid, lithium chloride trihydrate, lithium nitrate trihydrate, sodium carbonate decahydrate, sodium borate decahydrate, hydrated epsom salts, magnesium nitrate hexahydrate, beryllium sulfate tetrahydrate, sodium phosphate dodecahydrate,

calcium chloride hexahydrate, zinc sulfate heptahydrate, magnesium chloride hexahydrate, sodium sulfate decahydrate, aluminum oxide trihydrate, aluminum sulfate decaoctahydrate, aluminum fluoride trihydrate, aluminum nitrate nonhydrate and any eutectic blends of any of these materials including salts with melting points below 550 degrees Celsius.

65. (original) The thermal control composite of claim 60, wherein said recyclable endothermic agent is selected from the group consisting of oxidized polymers, unoxidized polymers, oxidized homopolymers of ethylene polymer compounds, unoxidized homopolymers of ethylene polymer compounds, carbon monoxide-bonded copolymers, micronized polyethylene waxes, petroleum derived waxes, ethylene-bis-stearamide, N,N-ethylene-bis-stearamide, tars, high molecular weight oils, high molecular weight hydrocarbons, polyvinyl alcohols, oxidized polyethylene homopolymers, unoxidized polyethylene homopolymers, carnauba wax, glycerin, glycol, and glycerin/glycol hydrated salts and any eutectic blends of any of these materials including salts with melting points below 550 degrees Celsius.

66. (original) The flexible thermal control composite of claim 63, wherein the endothermic agent is recyclable.

67. (original) The flexible thermal control composite of claim 66, wherein said recyclable, micronized, endothermic agent is selected from the group consisting of oxidized polymers, unoxidized polymers, oxidized homopolymers of ethylene polymer compounds, unoxidized homopolymers of ethylene polymer compounds, carbon monoxide-bonded copolymers, micronized polyethylene waxes, petroleum derived waxes, ethylene-bis-stearamide, N,N-ethylene-bis-stearamide, tars, high molecular weight oils, high molecular weight hydrocarbons, polyvinyl alcohols, oxidized polyethylene homopolymers, unoxidized polyethylene homopolymers, carnauba wax, glycerin, glycol, and glycerin/glycol hydrated salts and any eutectic blends of any of these materials including salts with melting points below 550 degrees Celsius.

68. (original) The flexible thermal control composite of claim 62, wherein said recyclable endothermic agent is a phase change material.

69. (canceled)

70. (canceled)

71. (original) The flexible thermal control composite of claim 60, in the form of a film.

72. (original) The thermal control composite of claim 71, wherein said film has a thickness of 0.05 to 2.0 mil.

73. (original) The thermal control composite of claim 71, wherein said film contains said endothermic agent in an amount of 0.0001 and 1.2 grams per square inch.

74. (original) The thermal control composite of claim 60, in the form of a molded structure.

75. (currently amended) The thermal control composite of claim 74, wherein said molded structure contains said endothermic agent in an amount of 0.05 to ~~6%~~60% by weight of said molded structure.

76. (canceled)

77. (canceled)

78. (currently amended) The thermal control composite of claim 60, wherein ~~said polymer is a fluoroelastomer and~~ said endothermic agent is boric acid.

79. (new) A cured flexible thermal control composite comprising boric acid distributed, dispersed and suspended in a fluoroelastomer having a molecular structure consisting of long chains of mostly linear molecules which prior to curing provide interstitial spaces through which the boric acid is distributed, dispersed and suspended and become fixed therein on curing.

80. (new) The cured flexible thermal control composite of claim 60 in the form of a drapable film adaptable for use in protective clothing.

81. (new) The cured flexible thermal control composite of claim 60 which has been knit, spun or woven into protective cloth.

82. (new) Method for achieving thermal control in extreme environmental conditions which comprises utilizing a cured flexible thermal composite according to claim 60 as or on a surface to achieve an isothermal situation.

83. (new) Method for protecting spacecraft electronics and satellites from the harmful effects of solar radiation which comprises utilizing a cured flexible thermal composite according to claim 60 as a flexible thermal shield therefore.

84. (new) Method for providing for absorption of heat which comprises utilizing a cured flexible thermal composite according to claim 60 in at least one of clothing, a boat, furniture, a pipe, a house, a diving suit, a hose, an auto interior, a fire wall, fire gear and chemical processing equipment.